

101-FR8-9014
Manage the Maintenance of Petroleum Equipment
Status: Approved

Distribution Restriction: Approved for public release; distribution is unlimited.

Destruction Notice: None

Foreign Disclosure: FD1 - This training product has been reviewed by the training developers in coordination with the Fort Lee, VA foreign disclosure officer. This training product can be used to instruct international military students from all approved countries without restrictions.

Condition: You are a Petroleum and Water Officer responsible for managing the maintenance of petroleum equipment. Personnel and equipment required to perform the task: MOS qualified 92F Soldiers, operational petroleum equipment to include a Tactical Petroleum Terminal (TPT) with petroleum products, communication equipment, safety data sheets (SDS), fire extinguishers, spill kits/containment and clean up equipment, Facility Response Plan (FRP), Spill Prevention Control and Countermeasures (SPCC) plan, Oil Discharge Contingency Plan (ODCP) (if required), oral or written operations order (OPORD), unit standing operating procedure (SOP) on maintenance procedures. You have access to all applicable references to include petroleum equipment technical manuals (TMs), and status reports. This task should not be trained in MOPP 4.

Standard: Ensure the maintenance of petroleum equipment is performed when scheduled and in accordance with equipment TMs. Maintenance SOP should be current and available. Maintenance records indicate petroleum equipment is mission capable or scheduled for repairs.

Special Condition: None

Safety Risk: Low

MOPP 4: Never

Task Statements

Cue: None

DANGER
None

WARNING
Sludge that accumulates in the bottom of the fuel tank gives off toxic and explosive vapors. Inhaling these vapors can cause lead poisoning. When cleaning storage tanks, provide ample ventilation to carry off harmful fumes. Failure to observe these precautions may result in death or serious injury to personnel.

CAUTION
None

Remarks: None

Notes: None

Performance Steps

1. Ensure a maintenance program is available and current. IF a program is not available, THEN prepare an SOP and implement as required.
2. Ensure the program covers procedures for inspecting and performing maintenance on all pumps and filter separators.
 - a. Ensure PMCS is scheduled and performed when required.
 - b. Ensure personnel are trained.
3. Ensure the program covers procedures for inspecting and performing maintenance on storage tanks.
 - a. Ensure PMCS is scheduled and performed when required.
 - b. Ensure the Black, Red, Amber, and Green (BRAG) rating system is being used to identify and report the operational capability of collapsible fabric storage tanks.
 - c. Identify methods of vapor freeing storage tanks.
 - d. Determine the need for cleaning storage tanks.
 - e. Plan and ensure area is ready for cleaning operations.
 - f. Determine equipment needed for cleaning operation.
 - g. Ensure personnel are trained.
 - h. Ensure medical personnel are present while tank cleaning operations are being performed.
4. Ensure the program covers procedures for inspecting all valves, gauges, and fittings.
 - a. Ensure PMCS is scheduled and performed when required.
 - b. Ensure personnel are trained
5. Ensure the program covers procedures for inspecting, cleaning, and repairing other petroleum handling equipment.
 - a. Ensure PMCS is scheduled and performed when required.
 - b. Ensure personnel are trained.
6. Ensure the program covers measures to prevent external corrosion of pipeline.
 - a. Ensure soil studies are done, avoid high acidic areas.
 - b. Restore protective coverings to their original condition.
 - c. Use sacrificial anodes.
 - d. Use mitigation bonds.
 - e. Use rectifier readings.

7. Ensure the program covers measures to prevent internal corrosion of pipeline.
 - a. Run scraper through the pipeline.
 - b. Use corrosion inhibitors.
8. Ensure the program covers maintenance of meters and meter verification.
 - a. Ensure PMCS is scheduled and performed when required.
 - b. Ensure personnel are trained.
9. Ensure the correct forms are prepared to schedule inspections, PMCS, and to record inspections that resulted in the need for repairs.
10. Ensure equipment is mission capable or scheduled for repairs.
11. Monitor operations to ensure compliance with the maintenance program.

(Asterisks indicates a leader performance step.)

Evaluation Guidance: Score the soldier GO if all steps are passed. Score the soldier NO GO if any steps are failed. If the soldier scores a NO GO, show what was done wrong and how to do it correctly.

Evaluation Preparation: At the test site provide all materials that are relevant to the task to include those mentioned in the condition statement.

PERFORMANCE MEASURES	GO	NO-GO	N/A
1. Ensured a maintenance program was available and current. IF a program was not available, prepared an SOP and implemented as required.			
2. Ensured the program covered procedures for inspecting and performing maintenance on all pumps and filter separators.			
3. Ensured the program covered procedures for inspecting and performing maintenance on storage tanks.			
4. Ensured the program covered procedures for inspecting all valves, gauges, and fittings.			
5. Ensured the program covered procedures for inspecting, cleaning, and repairing all other petroleum handling equipment.			
6. Ensured the program covered measures to prevent external corrosion.			
7. Ensured the program covered measures to prevent internal corrosion.			
8. Ensured the program covered maintenance of meters and meter verification.			
9. Ensured the correct forms were prepared for scheduled inspections, PMCS, and to record inspections that resulted in the need for repairs.			
10. Ensured equipment was mission capable or scheduled for repairs.			
11. Ensured personnel complied with the maintenance program.			

Supporting Reference(s):

Step Number	Reference ID	Reference Name	Required	Primary
	ATP 4-43	Petroleum Supply Operations	No	No
	TB 10-5430-253-13	Technical Bulletin for Collapsible Fabric Fuel Tanks	No	No

TADSS : None

Equipment Items (LIN):

LIN	Name
R45543	Radio Set: AN/VRC-92F(C)
T56041	Terminal Tactical Petroleum: Marine

Materiel Items (NSN) :

Step ID	NSN	LIN	Title	Qty
No materiel items specified				

Environment: Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to the current Environmental Considerations manual and the current GTA Environmental-related Risk Assessment card.

Safety: In a training environment, leaders must perform a risk assessment in accordance with ATP 5-19, Risk Management. Leaders will complete the current Deliberate Risk Assessment Worksheet in accordance with the TRADOC Safety Officer during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Protection, FM 3-11.5, Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Decontamination.

Prerequisite Individual Tasks : None

Supporting Individual Tasks : None

Supported Individual Tasks : None

Supported Collective Tasks : None

ICTL Data :

ICTL Title	Personnel Type	MOS Data
Petroleum and Water Officer ICTL (CMDT Appr 6 Mar 2014)	Officer	AOC: 90A, Rank: CPT, SI: R8, LIC: YY